



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,630	04/22/2004	Dennis R. Raffaelli	INL-00059	7299
7590 08/18/2005 Warn, Burgess & Hoffmann, P.C. P.O. Box 70098 Rochester, MI 48307			EXAMINER NGUYEN, DUNG V	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/829,630	RAFFAELLI, DENNIS R.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dung V. Nguyen	3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.  
 4a) Of the above claim(s) 2,8-14,16,22-28,30 and 32 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1,3-7,15,17-21,29 and 31 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6, 15, 20, 29 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Videcoq et al (USPN 5,951,381) in view of Robichon (USPN 5,846,125). Videcoq et al discloses a rotary edging wheel 1 and method of use for rough cutting of an optical lens 14 comprising a hub portion 2 operable for attaching to a rotary power source 11, wherein the hub portion includes a substantially solid body member 2, an outer circumferential rough cutting surface 3 having a width L, wherein the surface 3 is adjacent to the body member 2, the surface 3 including an abrasive grit attached thereto, wherein the abrasive grit is operable for rough cutting of the optical lens 14 (note Fig. 1, col., line 66 to col. 2, line 40). However, Videcoq et al does not disclose at least one pair of grooves formed in the surface comprising a first groove extending at an angle across the surface, a second groove extending at an angle across the surface, wherein the first and second grooves are angled either towards each other or away from each other and extend continuously across the surface. Robichon discloses at least one pair of grooves 11 formed in the surface 7 comprising a first groove extending at an angle across the surface, a second groove extending at an angle across the surface, wherein the first and second grooves are angled either

Art Unit: 3723

towards each other or away from each other and extend continuously across the surface 7, wherein the abrasive grit 10 is attached to the wheel by resin bonding (note Fig. 1 and 2, col. 1, lines 24-42, col. 2, line 58 to col. 3, line 44). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the surface of Videcoq et al with grooves as disclosed by Robichon in order to take away heat produced in the grinding work and carry away the cuttings produced far from the work area.

3. Claims 3-5 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Videcoq et al (USPN 5,951,381) in view of Robichon (USPN 5,846,125). Videcoq et al, as modified by Robichon, lacks each groove has an angle of from about 10 degrees to about 80 degrees, about 15 degrees to about 65 degrees, about 35 degrees to about 45 degrees. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select each groove has an angle of from about 10 degrees to about 80 degrees, about 15 degrees to about 65 degrees, about 35 degrees to about 45 degrees, since it has been held that where the general conditions of a claim is disclosed in the prior art, discovering the optimum or workable ranges involve only routine skill in the art. *In re Aller*, 105 USPQ 233.

4. Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Videcoq et al (USPN 5,951,381) in view of Robichon (USPN 5,846,125) further in view of Wu et al (USPN 6,047,278). Videcoq et al, as modified by Robichon, lacks abrasive grit is comprised of diamond hardness grit. Wu et al discloses that cubic boron nitride and diamond are well known superabrasive. It would have been obvious to one having

Art Unit: 3723

ordinary skill in the art at the time the invention was made to substitute cubic boron nitrate of Robichon with diamond as disclosed by Wu et al in order to provide user with additional abrasive material for grinding wheel.

***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 6, 15, 20, 29 and 31 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

7. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung V. Nguyen whose telephone number is 571-272-4490. The examiner can normally be reached on M-F, 7:00-3:30.

Art Unit: 3723

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**DUNG VAN NGUYEN**  
**PRIMARY EXAMINER**

DVN  
August 15, 2005